

BULLETIN  
PENNSYLVANIA DEPARTMENT OF AGRICULTURE  
HARRISBURG

VOL. 11

FEBRUARY 1, 1928

No. 2

General Bulletin No. 456

# LIME REPORT

## 1926-1927

BUREAU OF FOODS AND CHEMISTRY

James W. Kellogg,  
*Director-Chief Chemist*



C. G. JORDAN, *Secretary of Agriculture.*

Published monthly by direction of the Secretary. Entered as second class matter, March 22, 1918, at the Post Office at Harrisburg, Pa., under the Act of June 6, 1900. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on June 29, 1918.

## CONTENTS

---

	Page
Letter of Transmittal, .....	2
Introduction, .....	3
Conclusions, .....	4
Acknowledgments, .....	6
Lime Products Registered for 1927, .....	6
Table I, Average Analyses and Retail Prices, .....	14
Explanation of Tables of Analyses, .....	15
Table II, Pulverized Limestone, Oyster Shell, Artificial Carbonate of Lime and Marl, .....	16
Table III, Lime, Hydrated Lime and Miscellaneous, .....	24
Table IV, Gypsum or Land Plaster, .....	34

BULLETIN  
PENNSYLVANIA DEPARTMENT OF AGRICULTURE  
HARRISBURG

VOL. 11

FEBRUARY 1, 1928

No. 2

GENERAL BULLETIN No. 456

# LIME REPORT

## 1926-1927

BUREAU OF FOODS AND CHEMISTRY

James W. Kellogg,  
*Director-Chief Chemist*



C. G. JORDAN, *Secretary of Agriculture*

Published monthly by direction of the Secretary. Entered as second class matter, March 22, 1918, at the Post Office at Harrisburg, Pa., under the Act of June 6, 1900. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on June 29, 1918.

## LETTER OF TRANSMITTAL

---

### PENNSYLVANIA DEPARTMENT OF AGRICULTURE BUREAU OF FOODS AND CHEMISTRY

Harrisburg, February 8, 1928.

Dr. C. G. Jordan,  
Secretary of Agriculture,  
Harrisburg, Pennsylvania.

Dear Sir:—

I have the honor to transmit herewith for your approval a report, showing the results accomplished in the enforcement of the Agricultural Lime Law during 1926 and 1927, which includes the analyses of official samples obtained by Special Agents from sales agencies throughout the Commonwealth during the Spring and Fall shipping season and a list of the brands registered for 1927.

It is recommended that this report be published in bulletin form for distribution.

Very respectfully,

JAMES W. KELLOGG,  
Director-Chief Chemist

# LIME REPORT

1926-1927

---

## Introduction

The Lime Law, Act of June 1st, 1915, requires all Lime Products sold or offered for sale in Pennsylvania for agricultural purposes, to be registered for each calendar year; all sacks or attached cards, or cards attached to bins in the case of bulk sales, to be printed with the brand or trade names, name and address of manufacturers, importers or jobbers and guarantees for the minimum percentages of Calcium Oxide and Magnesium Oxide which they may contain. In the case of Pulverized Limestone, Ground Oyster Shell and Artificial Carbobnate of Lime, guarantees are also required for the minimum percentages of Calcium Carbonate and Magnesium Carbonate, equivalent to the contents of Calcium and Magnesium Oxide, together with the size of sieve mesh through which the coarsest particles will pass upon sieving.

As the amount of registration fees for brands sold during a preceding year is based on the amount of Lime Products sold, the Law also requires the number of tons sold to be reported with applications for registration.

Provision is also made for enforcement by authorizing the collection and analysis of official samples representing the various brands or kinds of Lime Products offered for sale; for the publications of the results of analyses for the information of the public and also for the analysis of special samples for residents of the Commonwealth.

Accordingly, during the Spring and Fall shipping seasons, of 1926 and 1927, Special Agents of the Bureau collected from sales agencies throughout the Commonwealth, 261 official samples which together with reports showing the information printed upon sacks or attached cards and sales conditions, were submitted for examination. Of this number, 248 representing 76 brands, registered by 55 companies, were analyzed for Calcium Oxide and Magnesium Oxide, the active elements effective in neutralizing soil acidity, for the purpose of ascertaining the correctness of the guarantees. They included the following classes and number of brands and samples.

Classes	Brands	Samples
Pulverized Limestone, .....	23	68
Pulverized Oyster Shell, .....	3	4
Artificial Carbonate of Lime, .....	3	16
Marl, .....	2	12
Lime, Burned .....	4	7
Hydrated Lime, low magnesia, .....	27	112
Hydrated Lime, high magnesia, .....	8	18
Gypsum, .....	2	7
Miscellaneous, .....	4	4
Total, .....	76	248

The Lime Products registered for 1927 included 184 different brands and kinds put out by 106 companies, which will be found listed in the following pages. The number registered for the preceding year, 1926, included 181 different kinds and brands.

According to the figures reported with applications for registration covering the Lime Products registered for 1927, the total tonnage sold during 1926 was 284,826, divided as follows: Pulverized Limestone, Artificial Carbonate of Lime, Oyster Shell and Marl, 159,366; Hydrated Lime, 83,696; Burned Lime, 28,035; Gypsum, 310 and Miscellaneous 13,419 tons. The figures reported for 1925 show total sales of 289,717 tons divided as follows: Pulverized Limestone, Artificial Carbonate of Lime, Oyster Shell and Marl, 159,965; Hydrated Lime, 85,103; Burned Lime, 32,472; Gypsum, 254 and Miscellaneous, 11,923 tons.

During the period covered by this report, 130 special samples of Lime products were submitted for analysis by residents of the Commonwealth, together with required fee of \$1.00 for each sample. The results of analysis were promptly submitted and the fees paid to the State Treasurer as required.

### Conclusions

The 68 samples of Pulverized Limestone were found to vary in their chemical composition, from 28.41 to 55.02, averaging 51.57 per cent calcium oxide, equivalent to 50.68, 98.16 and 92.0 per cent, calcium carbonate respectively. The magnesium oxide varied from .41 to 18.79 averaging 1.95 per cent, being equivalent to .86, 39.30 and 4.02 per cent, magnesium carbonate respectively. The retail selling prices were reported as ranging from \$3.75 to \$13.50, averaging \$7.23 a ton. There were 39 samples of this class found to be deficient in calcium oxide and 5 in magnesium oxide.

In the case of Pulverized Oyster Shell, the 4 samples received varied from 42.25 to 46.71, averaging 44.01 per cent calcium oxide, being equivalent to 75.37, 83.33 and 78.51 per cent calcium carbonate

respectively. The magnesium oxide varied from .52 to .67 averaging .58 per cent, being equivalent to 1.09, 1.40 and 1.21 per cent magnesium carbonate respectively. The selling prices ranged from \$6.70 to \$15.00, averaging \$9.84 a ton.

The result of analysis of the 16 samples of Artificial Carbonate of Lime show variations of from 45.97 to 53.71, averaging 49.38 per cent, calcium oxide, being equivalent to 82.01, 95.81 and 88.10 per cent, calcium carbonate respectively. The magnesium contents were from .63 to 5.71 averaging 3.15 per cent, being equivalent to 1.32, 11.94 and 6.58 per cent, magnesium carbonate respectively. Three of these were deficient in calcium oxide and 1 in magnesium oxide. The selling prices were from \$9.00 to \$13.25, averaging \$11.23 a ton.

The 12 samples of Marl varied in their composition from 47.42 to 53.77 averaging 50.18 per cent calcium oxide, being equivalent to 84.59, 95.92 and 89.51 per cent calcium carbonate respectively. The percentages of magnesium oxide were from .20 to .75, averaging .55 per cent being equivalent to .42, 1.57 and 1.13 per cent magnesium carbonate respectively. The retail selling prices were from \$7.70 to \$13.00, averaging \$11.52 a ton. There were 6 of this class deficient in calcium oxide.

Burned Lime, represented by 7 samples, varied from 42.35 to 96.28, averaging 58.58 per cent calcium oxide and from .67 to 30.86, averaging 17.0 per cent magnesium oxide. Retail selling prices were reported of from \$7.50 to \$12.00 and averaged \$10.56 a ton. Five samples were found deficient in calcium oxide and 4 in magnesium oxide.

There were 112 samples of Hydrated Lime of the Low Magnesia type which were found to contain from 56.49 to 73.28, averaging 67.68 per cent calcium oxide and from .64 to 9.53, averaging 2.24 per cent magnesium oxide. The retail selling values were from \$9.00 to \$24.00, averaging \$13.25 a ton. Six samples were found deficient in calcium oxide and 23 in magnesium oxide. There were 18 samples classified as being of the High Magnesia type which were found to contain from 39.71 to 59.49, averaging 46.88 per cent calcium oxide and from 13.88 to 33.80, averaging 29.38 per cent magnesium oxide. The selling prices were from \$11.00 to \$20.00 and averaged \$15.02 a ton. Of the Hydrated Limes, high magnesia, 3 were deficient in calcium oxide and 4 in magnesium oxide.

The 7 samples of Gypsum ranged from 29.71 to 33.16 and averaged 31.69 per cent calcium oxide, the sulphur trioxide ranged from 40.10 to 43.26, averaging 42.15 per cent, being equivalent to 86.23, 93.03 and 90.64 per cent calcium sulphate respectively. The retail selling prices were from \$13.00 to \$20.00, averaging \$17.82 a ton. Two samples were deficient in calcium oxide and 4 in sulphur trioxide.

Of the total official samples analyzed 64, or 25.8 per cent, were deficient in calcium oxide, and 38, or 15.3 per cent. were deficient in magnesium oxide to the extent of .50 per cent or more below their guarantees.

### Acknowledgments

Mr. V. B. Hausknecht, First Assistant Chemist, in charge of the Chemical Laboratory, had immediate supervision of the reception of samples, the analytical work and the approval of applications for registration and the issuing of licenses. The following Assistant Chemists performed the chemical analyses: Messrs. G. J. Kuhlmann, Jr., Claude R. Engle, Frank B. Williams, Harold Y. Fisher, Joseph F. Bradley and Harry C. Stup. The samples were prepared for analysis by Messrs. W. W. Cassel and Myrle W. Copeland, Laboratory Assistants.

### Lime Products Registered For 1927

The Lime Products registered for 1927 sales included 184 different brands and kinds, registered by 106 manufacturing, importing and jobbing firms, and were as follows:

## Lime Products Registered for the Year 1927

ALBA MARL LIME CO., CHARLES TOWN, W. VA.  
Alba Marl

THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK, N. Y.  
Ground Land Plaster  
Phospho Plaster

AMERICAN LIME & STONE CO., BELLEFONTE, PA.  
No. 1 Agricultural Lime  
Bald Eagle Hydrated Lime  
Also Pulverized Limestone  
Forkings  
Spray Lime  
American Agricultural Lime

F. M. BAKER, HUEFNER, PA.  
Burned Ground Lime

J. E. BAKER COMPANY, YORK, PA.  
Snow Flake Ground Limestone  
Victor Burned Lime  
Victor Hydrated Lime  
Susquehanna Hydrated Lime  
Agri-Lime

F. D. BARNHART & SONS, MOUNT PLEASANT, PA.  
Hydrated Lime

S. W. BARRICK & SONS, WOODSBORO, MD.  
Barrick's Agricultural Lime  
Barrick's Ground Agricultural Lime  
Barrick's Hydrated Lime

BAUGH & SONS COMPANY, PHILADELPHIA, PA.  
Pure Ground Land Plaster

BLAIR LIMESTONE CO., MARTINSBURG, W. VA.  
Opequon Hydrated Lime  
Shenandoah Ground Lime  
Blair Special Hydrated Lime

BLUE ROCK LIME QUARRIES, SLIPPERY ROCK, PA.  
Blue Rock Pulverized Lime

BONNYMEADS FARMS, HARRISBURG, PA.  
Agricultural Lump Lime  
Agricultural Lime Screenings

THE BUFFALO SLAG CO., BUFFALO, N. Y.  
Bison Brand Agricultural Slag

## JOHN J. CANNON, WILLOW GROVE, PA.

Cannon's Ground Burnt Lime

## THE CARBON LIMESTONE CO., YOUNGSTOWN, OHIO.

Carbon Agricultural Limestone

Carbon Limestone Meal

## THE PHILIP CAREY MANUFACTURING CO., PLYMOUTH MEETING, PA.

Ammaco Hydrated Lime

## CASTANEA PAPER CO., JOHNSONBURG, PA.

Nypen Agricultural Precipitated Lime

## THE CENTRAL CHEMICAL CO., HAGERSTOWN, MD.

Gro-All Hydrated Lime

Gro-All Oyster Shell Lime

## CENTRE COUNTY LIME CO., BELLEFONTE, PA.

Agricultural Hydrated Lime

Agricultural Lime

Agricultural Ground Limestone

## CHEMICAL LIME CO., BELLEFONTE, PA.

Clover Brand Agricultural Lime

Agricultural Lime

Agricultural Ground Limestone

## CLIMAX LIME CO., WICK, PA.

Climax Lump Lime

Hydrated Lime

## THE COLUMBIA PRODUCTS COMPANY, CLEVELAND, OHIO.

Plant Lime

Ohio Farmers Lime

## F. E. CONLEY STONE CO., UTICA, N. Y.

Ground Limestone

## CONSOLIDATED STONE &amp; MINING CO., NEW CASTLE, PA.

Beaver Lump Lime

Beaver Hydrated Lime

Beaver Ground Lime

## G. AND W. H. CORSON, PLYMOUTH MEETING, PA.

Corson's Prepared Lime

Corson's Run of Kiln Lime

## DIETRICK LIME &amp; SUPPLY CO., READING, PA.

Dietrick's Gold Medal Brand Hydrated Lime

## DUCK RUN LIME CO., NEW CASTLE, PA.

Duck Run Agricultural Lime

DUQUESNE SLAG PRODUCTS CO., PITTSBURGH, PA.  
Agricultural Slag SLS Brand

DYSON & RICE, LANDISBURG, PA.  
Landisburg Lime

EHRET MAGNESIA MANUFACTURING CO., VALLEY FORGE, PA.  
Ehret's Hydrated Land Lime

EMIG LIME CO., HELLAM, PA.  
Emig Agricultural Lime  
Blu-Roc Hydrate Lime

FALLING SPRING LIME CO., INC., BARBER, VA.  
Falling Spring Precipitated Lime

THE FOUNTAIN ROCK LIME CO., WOODSBORO, MD.  
Old Reliable Fountain Rock Hydrated Lime

GROVE CITY LIMESTONE CO., SHARON, PA.  
Four Leaf Clover Brand Agricultural Lime

M. J. GROVE LIME CO., LIME KILN, MD.  
Famous Frederick County Agricultural Lime  
Famous Frederick County Hydrated Lime  
Famous Frederick County Ground Lime  
Pulverized Limestone  
Carbo Oxide

HAGERSTOWN LIME & CHEMICAL CO., HAGERSTOWN, MD.  
Hagerstown Lime Marl

I. DANA KAHLE, KNOX, PA.  
Pulverized Limestone (Royal Blue Brand)

LUTHER KELLER CO., SCRANTON, PA.  
Keller Lump Agricultural Lime

THE KELLEY ISLAND LIME & TRANSPORT CO., CLEVELAND, OHIO.  
Tiger Hydrated Lime (Marblehead)  
Tiger Hydrated Lime (White Rock)  
Tiger Agricultural Hydrated Lime (Marion)  
Tiger Agricultural Hydrated Lime (Marblehead)  
Marblehead Agricultural Pulverized Limestone (Marblehead)

KEYSTONE GRANGE EXCHANGE, INC., HARRISBURG, PA.  
Grangers Agricultural Lime

HENRY KILGUS, MUNCY, PA.  
Muncy Lump Lime

THE KITTANNING LIMESTONE CO., KITTANNING, PA.  
Kittanning Raw Pulverized Limestone  
No. 2 Buckwheat

E. E. KOUGH, NEWVILLE, PA.  
Spangler's Pulverized Lime

W. C. KRABER, YORK, PA.  
White Rose Hydrated Lime

LANDIS STONE MEAL CO., RHEEMS, PA.  
White Lilly Brand Pulverized Limestone

E. J. LAVINO & CO., PHILADELPHIA, PA.  
Lavino Pulverized Limestone

THE LEGORE LIME COMPANY, LEGORE, MD.  
LeGore Lump Lime  
LeGore Ground Burnt Lime  
LeGore Hydrated Lime  
LeGore Pulverized Limestone

LIMETON LIME CO., INC., FRONT ROYAL, VA.  
Clover Brand Agricultural Hydrate

LIMESTONE PRODUCTS CORPORATION OF AMERICA, NEWTON, N. J.  
Lime Crest Brand of Pulverized Limestone

LOW BROTHER & COMPANY, LIME RIDGE, PA.  
Grade "A" Lime

THE LUCKEY LIME & SUPPLY CO., LUCKEY, OHIO.  
Luckey Agricultural Hydrated Lime

W. E. MCCONNELL, MUNCY, PA.  
McConnell's Lump Lime

THE MARBLE CLIFF QUARRIES CO., COLUMBUS, OHIO.  
Marble Cliff Lawn Lime

JOHN MEEHAN & SON, PHILADELPHIA, PA.  
John Meehan & Son Hydrated Lime

MERCERSBURG LIME MARL CO., MERCERSBURG, PA.  
Antrim Marl

MERION LIME & STONE CO., NORRISTOWN, PA.  
Merion Hydrated Lime  
Run of Kiln Lime

MICHIGAN LIMESTONE & CHEMICAL CO., INC., BUFFALO, N. Y.  
Calcite Brand Michigan Limestone  
Calcite Brand Superfine Michigan Limestone

THE MOHAWK LIMESTONE PRODUCTS CO., MOHAWK, N. Y.  
Mohawk Pulverized Limestone  
Mohawk Lime Hydrate

NATIONAL LIMESTONE CO., NAGINEY, PA.  
High Grade Hydrated Lime

THE NATIONAL LIME & STONE CO., CAREY, OHIO.  
Wyandotte Chief Hydrated Agricultural Lime

NATIONAL MORTAR & SUPPLY CO., PITTSBURGH, PA.  
Superior Agricultural Hydrate Lime  
Banner Agricultural Limestone

NATURAL LIME MARL CO., ROANOKE, VA.  
Lime-Marl

NEW CASTLE LIME & STONE CO., NEW CASTLE, PA.  
Pulverized Agricultural Limestone

NEW JERSEY LIME PRODUCTS CORPORATION, NEW YORK, N. Y.  
Magic Agricultural Limestone

NORTH AMERICAN CEMENT CORPORATION, HAGERSTOWN, MD.  
Berkeley Hydrated Lime  
Berkeley Hydra-Calcite Lime  
Berkeley Pulverized Limestone  
Berkeley Run of Hammer Mill Ground Lime

THE OHIO MARBLE CO., PIQUA, OHIO.  
Miami Agricultural Limestone

JOHN D. OWENS & SON CO., OWENS, OHIO.  
Clover Leaf Brand Agricultural Hydrate Lime

THE OYSTER SHELL PRODUCTS CO., PHILADELPHIA, PA.  
Ground Oyster Shell Lime

PARAGON PLASTER AND SUPPLY CO., BLOOMSBURG, PA.  
Paragon Hydrate Lime

PATUXENT GUANO CO., BALTIMORE, MD.  
Patuxent Crushed Oyster Shell Lime

PEERLESS LIME CO., HYNDMAN, PA.  
No. 8 Blue Stone Lime (Burned)

PENNSYLVANIA LIME PRODUCTS COMPANY, PHILADELPHIA, PA.  
Keystone Hydrated Lime

THE PINE CREEK LIME & STONE CO., JERSEY SHORE, PA.  
Imperial Hydrated Lime

PITTSBURGH STAR LIME CO., PITTSBURGH, PA.  
Star Lime

POTOMAC POULTRY FOOD CO., INC., BALTIMORE, MD.  
Potolime Oyster Shell Lime

PURE CALCIUM PRODUCTS CO., PITTSBURGH, PA.  
Superior Farm and Garden Lime

READING POULTRY FOOD CO., READING, PA.  
Reading Oyster Shell Lime

REEDER LIME & STONE CO., MUNCY, PA.  
Freshly Burned Chippewa Lump Lime  
Chippewa Ground Burned Lime

ROBERT A. REICHARD, INC., ALLENTOWN, PA.  
Pennsylvania Hydrated Lime  
Lehigh Hydrated Lime  
Lehigh Ground Burnt Lime  
Reichard's Marl Lime

REYNOLDSVILLE LIME CO., REYNOLDSVILLE, PA.  
Hydrated Lime

ROSE POINT STONE & LIME CO., NEW CASTLE, PA.  
Rose Point Burned Lump Lime  
Rose Point Ground Burned Lime  
Rose Point Hydrated Lime  
Peerles Hydrated Lime

THE I. W. SCOTT CO., PITTSBURGH, PA.  
Superior Ground Limestone

THE SOLVAY PROCESS CO., SYRACUSE, N. Y.  
Solvay Pulverized Limestone

STANDARD CHEMICAL WORKS, INC., READING, PA.  
Snowflake Hydrated Lime

THE STANDARD LIME & STONE CO., BALTIMORE, MD.  
Standard Pulverized Limestone

THE STANDARD SLAG CO., YOUNGSTOWN, OHIO.  
Standard Agricultural Slag  
Ground Slag

STEACY & WILTON COMPANY, WRIGHTSVILLE, PA.  
Sterling Brand Hydrated Lime  
Pulverized Fresh Burned Lime  
Run of Kiln Agricultural Lime  
Pulverized Limestone

SUPERIOR LIME CO., YORK, PA.  
Superior Brand Lime

THOMASVILLE STONE & LIME CO., THOMASVILLE, PA.  
Ground Limestone

TOMKINS BROTHERS, NEWARK, N. J.  
Essex Hydrated Lime

EDWARD TULE, MUNCY, PA.

Lime Bluff Lump Lime

F. W. TUNNELL & CO., INC., PHILADELPHIA, PA.

Limonia

TYRONE LIME & STONE CO., TYRONE, PA.

Agricultural Ground Limestone

Sweet Clover Pulverized Limestone

UNITED STATES GYPSUM CO., CHICAGO, ILL.

U. S. G. Agricultural Hydrated Lime (CaO 40%)

U. S. G. Agricultural Hydrated Lime (CaO 49.26%)

Ben Franklin Agricultural Gypsum

UNIVERSAL GYPSUM & LIME CO., CHICAGO, ILL.

Challenge Brand Spraying Hydrated Lime

Palmer Hydrated Lime

Challenge Brand Pulverized Limestone Flour

Chemical Lump Lime Spraying

Challenge Brand Agricultural Lime

VALLEY LIME MARL CO., PERRYSVILLE, MD.

Valley Lime Marl

THE VAN SCIVER CORPORATION, PHILADELPHIA, PA.

Knickerbocker Hydrated Lime

Knickerbocker Run of Kiln Lime

Knickerbocker Ground Limestone

VERMARCO LIME COMPANY, WEST RUTLAND, VT.

Vermareo Agricultural Lime

CHARLES WARNER COMPANY, WILMINGTON, DEL.

Warner's Limoid (Hydrated Lime)

Pulverized Burned Lime

Pulverized Limestone

Run of Kiln Lime

Warner's Limoid Inoculated

THE WASHINGTON BUILDING LIME CO., BALTIMORE, MD.

Standard Hydrated Lime

Standard Lime

Standard 2 In 1

WEST BRANCH LIME CO., WILLIAMSPORT, PA.

Clover Leaf Quick Lime

Clover Leaf Hydrated Lime

WHITEROCK QUARRIES, BELLEFONTE, PA.

Run of Kiln

Forkings

Hydrated Lime (Nittany H-O)

Pulverized Limestone

WICKWIRE SPENCER STEEL CORPORATION, NEW YORK, N. Y.  
Wickwire Pulverized Limestone

THE WOODVILLE LIME PRODUCTS CO., TOLEDO, OHIO,  
Klover Krop Agricultural Lime (Hydrated Lime)  
Tenlime Household Hydrated

WORLOCK STONE CO., CANASTOTA, N. Y.  
Diamond "A" Agricultural Lime

YORK CHEMICAL WORKS, YORK, PA.  
Pure Ground Land Plaster

YORK VALLEY LIME & STONE CO., YORK, PA.  
 York Valley Lump Lime  
 York Valley Hydrated Lime

TABLE I—AVERAGE ANALYSES AND RETAIL PRICES

Classes of Lime Products	Number of Samples	Moisture	Calcium Oxide	Magnesium Oxide	Insoluble Matter	Price Per Ton
Pulverized Limestone, -----	68	% 0.10	% 51.57	% 1.95	% 3.48	\$ 7.23
Pulverized Oyster Shell, -----	4	0.97	44.01	0.58	13.49	9.84
Artificial Carbonate of Lime, -----	16	0.78	49.38	3.15	1.70	11.23
Marl, -----	12	2.04	50.18	0.55	4.29	11.52
Lime, -----	7	-----	58.58	17.00	5.63	10.56
Hydrated Lime {Low Magnesia, -----	112	-----	67.68	2.24	2.27	13.25
{High Magnesia, -----	18	-----	46.88	29.83	2.78	15.02
Miscellaneous, -----	4	-----	-----	*SO <sub>3</sub>	-----	-----
Gypsum, -----	7	1.89	31.69	42.15	2.92	17.82

\*Sulphur Trioxide equivalent to 90.64% as Calcium Sulphate.

## Explanation of Tables of Analysis

The Tables which follow, showing the results in detail of the chemical analyses of the official samples received during the two year period covered by the report, are arranged according to classes, Table II including Pulverized Limestone and Oyster Shell, Artificial Carbonate of Lime and Marl; Table III, Lime, Hydrated Lime and Miscellaneous; Table IV, Gypsum or Land Plaster. The information included in each table shows the Chemist's numbers, classes and brand names, the names and addresses of Manufacturers, Importers and Selling Agents, the percentages of calcium oxide and magnesium oxide found upon analyses, together with guarantees for these constituents and their equivalent estimated carbonate values with guarantees for these values in the case of Carbonates of Lime, and also the amounts of acid insoluble matter and retail selling values. Those samples which were found to be deficient in calcium and magnesium oxides to the extent of .50 per cent or more are indicated by an asterisk (\*).

In estimating the composition of the several classes of Lime Products, it is necessary to employ certain factors, which are derived from the chemical formulas representing them. As previously shown determinations are made for calcium oxide, magnesium oxide, carbon dioxide and sulphur trioxide. Carbonate of Lime is represented by the formula  $\text{CaCO}_3$ , Carbonate of Magnesia by  $\text{MgCO}_3$ , Gypsum or Calcium Sulphate by  $\text{CaSO}_4$ , Hydrated Lime by  $\text{Ca}(\text{OH})_2$ , and Magnesium Hydrate by  $\text{Mg}(\text{OH})_2$ . To estimate the amounts of these forms or combinations the percentages of Calcium Oxide and Magnesium Oxide secured are multiplied by their respective factors. In order that these factors may be at hand for reference, they are included herewith as follows:—

Given.	Required.	Factor.
Calcium oxide, .....	Calcium hydrate, .....	1.321
Calcium oxide, .....	Calcium carbonate, .....	1.7839
Calcium oxide, .....	Calcium sulphate, .....	2.4265
Calcium hydrate, .....	Calcium oxide, .....	.7570
Calcium carbonate, .....	Calcium oxide, .....	.5606
Calcium sulphate, .....	Calcium oxide, .....	.4121
Magnesium oxide, .....	Magnesium hydrate, .....	1.4468
Magnesium oxide, .....	Magnesium carbonate, .....	2.0913
Magnesium hydrate, .....	Magnesium oxide, .....	.6912
Magnesium carbonate, .....	Magnesium oxide, .....	.4782
Calcium oxide, .....	Sulphur trioxide, .....	1.4265
Carbon dioxide, .....	Calcium carbonate, .....	2.2757
Carbon dioxide, .....	Magnesium carbonate, .....	1.9159
Calcium carbonate, .....	Carbon dioxide, .....	.4394
Sulphur trioxide, .....	Calcium sulphate, (Gypsum), .....	2.1504

TABLE II—PULVERIZED LIMESTONE AND OYSTER

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—	Moisture
<b>PULVERIZED LIMESTONE</b>			<b>%</b>
<b>AMERICAN LIME &amp; STONE CO., BELLEFONTE, Pa.</b>			
C-1537	Also Pulverized Limestone, -----	American Lime and Stone Co., Bellefonte, -----	0.01
C-1517	Also Pulverized Limestone, -----	Bert Dobendorfer, Indiana, -----	0.01
C-1465	Also Pulverized Limestone, -----	Vincent A. Huber, Patton, -----	0.01
C-1543	Also Pulverized Limestone, -----	Vincent A. Huber, Patton, -----	0.01
C-1471	Also Pulverized Limestone, -----	Roy Laughlin, Marion Center, -----	0.02
C-1675	Also Pulverized Limestone, -----	Reed Estate, Philipsburg, -----	0.07
C-1636	Also Pulverized Limestone, -----	W. D. Walker, Bigler, -----	0.04
C-1499	Also Pulverized Limestone, -----	A. E. Woodruff & Sons, Wysox, -----	0.03
<b>THE CARBON LIMESTONE CO., YOUNGSTOWN, OHIO.</b>			
C-1421	Carbon Agricultural Limestone, -----	Paul T. Clawson, Salina, -----	0.07
C-1480	Carbon Agricultural Limestone, -----	John A. Day, Youngsville, -----	0.07
<b>CHEMICAL LIME CO., BELLEFONTE, PA.</b>			
C-1672	Agricultural Ground Limestone, -----	James Harmon, Berwick, -----	0.12
C-1625	Agricultural Ground Limestone, -----	Vincent A. Huber, Patton, -----	0.04
C-1634	Agricultural Ground Limestone, -----	C. H. Mons, Kylertown, -----	0.13
C-1650	Agricultural Ground Limestone, -----	James A. Simpson, Indiana, -----	0.09
<b>F. E. CONLEY STONE CO., UTICA, N. Y.</b>			
C-1194	Ground Limestone, -----	Wells Mill Co., Wyalusing, -----	0.04
<b>GROVE CITY LIMESTONE CO., SHARON, PA.</b>			
C-1570	Four Leaf Clover Brand Agricultural Limestone, -----	Franklin Feed & Supply Co., Franklin, -----	0.15
<b>I. DANA KAHLE, KNOX, PA.</b>			
C-1497	Royal Blue Brand Pulverized Limestone, -----	R. D. Foss, Petrolia, -----	0.13
C-1530	Royal Blue Brand Pulverized Limestone, -----	J. H. Shaffer Hardware, Knox, -----	0.07
<b>THE KELLEY ISLAND LIME &amp; TRANSPORT CO., CLEVELAND, OHIO.</b>			
C-1469	Marblehead Agricultural Pulverized Limestone, -----	Oil City Woodworking Manufacturing Co., Oil City, -----	0.02
<b>KEYSTONE GRANGE EXCHANGE, INC., HARRISBURG, PA.</b>			
C-1436	Granger's Agricultural Lime, -----	Stanley E. Van Scoy, Alderson, -----	1.92
<b>THE KITTANNING LIMESTONE CO., KITTANNING, PA.</b>			
C-1423	Kittanning Raw Pulverized Limestone, -----	Harry A. Nichol, Indiana, -----	0.05
<b>LIMESTONE PRODUCTS CORPORATION OF AMERICA, NEWTON, N. J.</b>			
C-1565	Lime Crest Brand of Pulverized Limestone, -----	J. B. Anderson's Son, Shickshinny, -----	0.16
C-1451	Lime Crest Brand of Pulverized Limestone, -----	Murray Co., Honesdale, -----	0.02
C-1617	Lime Crest Brand of Pulverized Limestone, -----	John Struppler, Montrose, -----	0.05
C-1544	Lime Crest Brand of Pulverized Limestone, -----	A. E. Woodruff & Son, Wysox, -----	0.01
<b>MICHIGAN LIMESTONE &amp; CHEMICAL CO., INC., BUFFALO, N. Y.</b>			
C-1546	Calcite Brand Michigan Limestone, -----	Elwin Allen, Canton, -----	0.01
C-1571	Calcite Brand Michigan Limestone, -----	Cochranon Cooperative Association, Cochranon, -----	0.13
C-1679	Calcite Brand Michigan Limestone, -----	Donora Flour & Feed, Donora, -----	0.07
C-1433	Calcite Brand Michigan Limestone, -----	Elk Cooperative Creamery, St. Marys, -----	0.05
C-1591	Calcite Brand Michigan Limestone, -----	Eulalia Milling Co., Coudersport, -----	0.04

## SHELL, ARTIFICIAL CARBONATE OF LIME AND MARL

Calcium Oxide		Calcium Carbonate		Magnesium Oxide		Magnesium Carbonate		Insoluble Matter	Fineness					Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed		Coarsest Particles Pass Sieve Mesh No.		Amount of Sample Passing Sieve Meshes				
									Found	Guaranteed	10 Mesh	50 Mesh	100 Mesh		
%	%	%	%	%	%	%	%	%	No.	No.	%	%	%	\$	
54.76	53.79	97.69	96.00	0.61	0.48	1.28	1.00	1.32	40	30	100.0	98.4	86.4	4.50	C-1537
55.02	53.79	98.15	96.00	0.66	0.48	1.38	1.00	1.30	40	30	100.0	99.2	88.0	6.85	C-1517
54.41	53.79	97.06	96.00	0.81	0.48	1.69	1.00	1.14	40	30	100.0	98.4	87.2	7.00	C-1465
54.96	53.79	98.04	96.00	0.72	0.48	1.51	1.00	0.98	40	30	100.0	98.8	87.2	7.00	C-1543
54.15	53.79	96.00	96.00	0.72	0.48	1.51	1.00	1.46	40	30	100.0	97.6	83.2	6.75	C-1471
54.82	53.79	97.79	96.00	0.65	0.48	1.36	1.00	1.40	100	30	100.0	100.0	100.0	10.0	C-1675
54.76	53.79	97.69	96.00	0.64	0.48	1.34	1.00	1.28	30	20	100.0	98.0	86.8	6.00	C-1666
54.64	53.79	97.47	96.00	0.70	0.48	1.46	1.00	1.28	50	30	100.0	100.0	96.0	8.00	C-1499
*50.05	53.65	89.28	-----	0.69	0.22	1.44	-----	6.36	20	10	100.0	78.0	64.0	6.80	C-1421
*50.00	53.65	89.20	-----	0.70	0.22	1.44	-----	6.32	20	10	100.0	80.8	67.6	6.50	C-1480
*51.80	52.52	92.41	94.12	1.74	1.54	3.64	3.00	4.28	30	20	100.0	91.6	85.6	7.20	C-1672
*51.14	52.52	91.23	94.12	1.67	1.54	3.49	3.00	5.10	20	20	100.0	76.4	62.0	7.00	C-1625
*51.35	52.52	91.60	94.12	1.77	1.54	3.70	3.00	4.54	20	20	100.0	94.0	86.0	6.75	C-1634
*51.74	52.52	92.30	94.12	1.64	1.54	3.43	3.00	4.68	10	20	100.0	94.0	82.8	6.00	C-1650
*51.10	52.00	91.16	92.76	*1.04	2.00	2.17	4.18	6.12	10	10	100.0	48.0	36.0	7.00	C-1494
*51.56	53.75	91.98	94.89	0.59	0.30	1.23	1.50	4.64	20	20	100.0	73.2	48.0	6.00	C-1570
51.08	51.46	91.12	91.80	0.83	1.03	1.84	2.26	4.12	20	20	100.0	80.0	67.2	8.00	C-1497
52.16	51.58	93.05	92.01	0.77	0.75	1.61	1.57	3.56	20	20	100.0	71.6	52.8	6.50	C-1530
44.44	44.80	79.28	79.92	8.34	6.20	17.44	12.97	2.36	20	10	100.0	78.0	69.6	10.00	C-1409
43.00	39.20	76.71	70.00	0.59	0.50	1.23	1.05	13.32	10	10	100.0	58.0	43.2	8.40	C-1436
*51.08	52.96	91.12	94.57	0.88	0.91	1.84	1.73	4.66	10	10	100.0	52.8	41.2	6.50	C-1423
*43.87	50.00	78.24	90.00	6.25	1.50	13.07	3.00	8.87	30	50	100.0	97.6	90.0	8.00	C-1665
*48.79	50.00	87.04	90.00	2.07	1.50	4.33	3.00	8.16	50	50	100.0	100.0	98.8	6.65	C-1451
*44.14	50.00	78.74	90.00	6.18	1.50	12.92	3.00	9.16	30	50	100.0	96.4	87.2	7.00	C-1617
*46.80	50.00	83.49	90.00	4.74	1.50	9.91	3.00	6.80	20	50	100.0	92.4	76.8	7.50	C-1544
*53.48	54.50	95.40	97.00	1.33	1.00	2.78	2.00	2.14	20	10	100.0	77.6	59.6	8.00	C-1546
*53.78	54.50	95.94	97.00	1.59	1.00	3.33	2.00	1.56	20	10	100.0	75.6	58.4	6.55	C-1571
*53.70	54.50	95.80	97.00	1.06	1.00	2.22	2.00	2.02	20	10	100.0	82.4	66.8	10.00	C-1679
*53.35	54.50	95.17	97.00	1.26	1.00	2.64	2.00	1.78	10	20	100.0	79.2	66.8	6.65	C-1433
54.22	54.50	96.72	97.00	0.86	1.00	1.80	2.00	1.14	20	10	100.0	87.2	74.8	7.25	C-1591

\*Deficient.

TABLE II—PULVERIZED LIMESTONE AND OYSTER SHELL,

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—	Moisture
C-1460	Calcite Brand Michigan Limestone, -----	Farmers Cooperative Association, Clearfield, -----	%
C-1542	Calcite Brand Michigan Limestone, -----	Farmers Cooperative Association, Clearfield, -----	0.03
C-1520	Calcite Brand Michigan Limestone, -----	Farmers Exchange, Indiana, -----	0.01
C-1562	Calcite Brand Michigan Limestone, -----	Farmers Exchange, Indiana, -----	0.01
C-1513	Calcite Brand Michigan Limestone, -----	Fred E. Flaugh, Meadville, -----	0.17
C-1514	Calcite Brand Michigan Limestone, -----	Fred E. Flaugh, Meadville, -----	0.02
C-1498	Calcite Brand Michigan Limestone, -----	E. L. Gilliland, Renfrew, -----	0.01
C-1455	Calcite Brand Michigan Limestone, -----	D. E. Goodenough, Coudersport, -----	0.07
C-1473	Calcite Brand Michigan Limestone, -----	W. W. Hopkins, Marion Center, -----	0.04
C-1673	Calcite Brand Michigan Limestone, -----	Ralph Hosler, Berwick, -----	0.03
C-1504	Calcite Brand Michigan Limestone, -----	H. C. Hutchinson, Hydetown, -----	0.10
C-1593	Calcite Brand Michigan Limestone, -----	LaRue & Faucher, Meshoppen, -----	0.03
C-1655	Calcite Brand Michigan Limestone, -----	John Loudon, Troutville, -----	0.04
C-1435	Calcite Brand Michigan Limestone, -----	Luzerne County Cooperative Association, Wilkes-Barre, -----	0.05
C-1582	Calcite Brand Michigan Limestone, -----	Luzerne County Cooperative Association, Wilkes-Barre, -----	0.03
C-1587	Calcite Brand Michigan Limestone, -----	Mahoning Valley Milling Co., Punxsutawney, -----	0.10
C-1651	Calcite Brand Michigan Limestone, -----	John Moffat, New Alexandria, -----	0.12
C-1659	Calcite Brand Michigan Limestone, -----	Lewis Yoder, Shartlesville, -----	0.07
C-1656	Calcite Brand Superfine Michigan Limestone, -----	John Loudon, Troutville, -----	0.08
	NEW CASTLE LIME & STONE CO., NEW CASTLE, PA.		0.05
C-1444	Pulverized Agricultural Limestone, -----	Bert Orr, Creekside, -----	0.03
C-1005	Pulverized Agricultural Limestone, -----	Ridgway Grist Mill, Ridgway, -----	0.10
	NEW JERSEY LIME PRODUCTS CORPORATION, NEW YORK, N. Y.		
C-1486	Magic Agricultural Limestone, -----	Lake Ariel Hardware Co., Lake Ariel, -----	0.03
C-1642	Magic Agricultural Limestone, -----	O. M. Spettigue, Honesdale, -----	0.05
	PURE CALCIUM PRODUCTS CO., PITTSBURGH, PA.		
C-1608	Superior Farm and Garden Lime, -----	J. K. Lawson, Washington, -----	0.13
C-1573	Superior Farm and Garden Lime, -----	Union Coal & Supply Co., Union City, -----	0.20
	THE SOLVAY PROCESS CO., SYRACUSE, N. Y.		
C-1613	Solvay Pulverized Limestone, -----	Ray H. Bolt, Great Bend, -----	0.08
C-1487	Solvay Pulverized Limestone, -----	H. M. Sayer, Moscow, -----	0.02
	THE STANDARD LIME & STONE CO., BALTIMORE, MD.		
C-1627	Standard Pulverized Limestone, -----	Edison Hay, Meyersdale, -----	0.12
	TYRONE LIME & STONE CO., TYRONE, PA.		
C-1467	Agricultural Ground Limestone, -----	Edgar Gooderham, Patton, -----	0.09
C-1630	Sweet Clover Pulverized Limestone, -----	Edgar Gooderham, Patton, -----	0.18
	UNIVERSAL GYPSUM & LIME CO., CHICAGO, ILL.		
C-1552	Challenge Brand Pulverized Limestone Flour	Chas. M. Harter, Wapwallopen, -----	0.04
C-1669	Challenge Brand Pulverized Limestone Flour	Chas. M. Harter, Wapwallopen, -----	0.04
C-1554	Challenge Brand Pulverized Limestone Flour	Henry E. Hartzell, Nesciopeck, -----	0.02
C-1671	Challenge Brand Pulverized Limestone Flour	Henry E. Hartzell, Nesciopeck, -----	0.08

## ARTIFICIAL CARBONATE OF LIME AND MARL—Continued

Calcium Oxide		Calcium Carbonate		Magnesium Oxide		Magnesium Carbonate		Insoluble Matter	Fineness					Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed		Coarsest Particles Pass Sieve Mesh No.		Amount of Sample Passing Sieve Meshes				
									Found	Guaranteed	10 Mesh	50 Mesh	100 Mesh		
%	%	%	%	%	%	%	%	%	No.	No.	%	%	%	\$	
*53.50	54.50	95.44	97.00	1.19	1.00	2.49	2.00	2.00	20	20	100.0	78.4	65.2	7.50	C-1460
*52.61	54.50	93.85	97.00	1.81	1.00	3.79	2.00	2.12	20	10	100.0	74.4	56.4	8.00	C-1542
*53.97	54.50	96.28	97.00	1.25	1.00	2.61	2.00	1.22	20	10	100.0	73.6	55.6	7.00	C-1520
54.05	54.50	96.42	97.00	1.14	1.00	2.38	2.00	1.72	20	10	100.0	84.4	71.6	8.00	C-1562
*53.97	54.50	96.28	97.00	1.15	1.00	2.40	2.00	1.30	20	10	100.0	71.6	51.6	6.50	C-1513
†53.73		95.85		1.38		2.90		1.44	20		100.0	74.0	55.6	5.00	C-1514
*53.06	54.50	94.65	97.00	1.19	1.00	2.49	2.00	2.02	20	10	100.0	80.4	67.6	6.80	C-1498
*52.84	54.50	94.26	97.00	1.18	1.00	2.47	2.00	2.58	20	16	100.0	76.4	64.0	7.25	C-1455
*53.24	54.50	94.97	97.00	1.13	1.00	2.36	2.00	2.58	20	10	100.0	80.0	66.0	6.75	C-1473
54.65	54.50	97.49	97.00	0.97	1.00	2.03	2.00	1.26	20	10	100.0	79.2	60.4	7.40	C-1673
*53.24	54.50	94.97	97.00	1.33	1.00	2.78	2.00	1.90	20	16	100.0	81.6	68.4	7.00	C-1504
*53.73	54.50	95.85	97.00	1.54	1.00	3.22	2.00	1.22	20	10	100.0	80.0	65.2	7.50	C-1593
*53.70	54.50	95.80	97.00	1.38	1.00	2.90	2.00	1.54	20	10	100.0	74.4	56.4	6.75	C-1655
*53.60	54.50	95.62	97.00	1.52	1.00	2.30	2.00	2.04	10	16	100.0	80.0	66.8	-----	C-1435
*53.83	-----	96.03	-----	1.25	-----	2.61	-----	1.62	20	-----	100.0	80.0	64.4	6.75	C-1582
54.04	54.50	96.40	97.00	1.49	1.00	3.12	2.00	1.14	20	10	100.0	75.2	57.2	7.25	C-1587
54.21	-----	96.71	-----	1.32	-----	2.76	-----	1.10	30	-----	100.0	99.2	92.8	6.00	C-1651
*53.42	54.50	95.30	97.00	1.56	1.00	3.26	2.00	1.24	10	10	100.0	74.8	56.8	7.50	C-1659
†53.31	-----	95.10	-----	0.98	-----	2.05	-----	1.50	50	-----	100.0	100.0	94.0	7.75	C-1656
50.62	46.75	90.30	-----	0.72	0.70	1.51	-----	6.16	20	10	100.0	78.4	65.2	6.40	C-1444
49.48	46.75	88.27	-----	0.74	0.70	1.55	-----	6.88	20	10	100.0	85.8	72.4	8.00	C-1605
*51.97	53.83	92.71	96.13	1.98	1.03	4.14	2.34	3.74	50	50	100.0	100.0	96.4	6.65	C-1486
*52.65	53.59	93.92	-----	2.09	0.96	4.37	-----	1.48	30	50	100.0	98.8	93.6	7.00	C-1642
*54.21	55.00	96.71	98.20	0.86	0.15	1.80	0.30	0.12	100	100	100.0	100.0	100.0	11.50	C-1608
54.59	55.00	97.38	98.20	0.41	0.15	0.86	0.30	0.20	100	100	100.0	100.0	100.0	13.50	C-1573
50.15	46.50	89.46	83.00	2.82	1.50	5.90	3.14	5.00	20	20	100.0	84.4	71.2	6.40	C-1613
49.65	48.00	88.57	85.67	2.45	2.50	5.12	5.23	5.26	20	20	100.0	88.8	78.0	6.25	C-1487
54.49	50.43	97.20	90.00	0.83	0.50	1.74	1.05	1.22	20	20	100.0	79.2	59.6	5.80	C-1627
48.78	48.68	87.02	86.84	1.39	1.87	2.91	3.91	8.04	20	10	100.0	50.8	38.8	6.00	C-1467
*50.82	52.91	90.66	94.50	1.72	0.60	3.60	1.26	6.08	30	40	100.0	98.0	88.8	6.00	C-1630
50.94	48.00	90.87	85.63	*4.06	6.00	8.49	10.46	1.76	100	100	100.0	100.0	100.0	9.00	C-1552
52.70	48.00	94.01	85.63	*3.69	6.00	5.63	10.46	1.20	100	100	100.0	100.0	100.0	7.50	C-1609
53.15	48.00	94.81	85.63	*2.23	6.00	4.66	10.46	1.50	100	100	100.0	100.0	100.0	8.75	C-1554
54.37	48.00	96.99	85.63	*1.66	6.00	3.47	10.46	0.48	100	100	100.0	100.0	100.0	8.75	C-1671

\*Deficient.

†Compared with registered guarantee.

TABLE II—PULVERIZED LIMESTONE AND OYSTER SHELL,

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—	Moisture
	WHITEROCK QUARRIES, BELLEFONTE, PA.		%
C-1629	Pulverized Limestone, -----	D. L. Westrick, Hastings, -----	0.11
C-1533	Pulverized Limestone, -----	Whiterock Quarries, Bellefonte, ---	0.22
	WICKWIRE SPENCER STEEL CORPORA- TION, NEW YORK, N. Y.		
C-1592	Wickwire Pulverized Limestone, -----	Chas. McDonnell, Mansfield, -----	0.09
	WORLOCK STONE CO., CANASTOTA, N. Y.		
C-1595	Diamond "A" Agricultural Lime, -----	Farmers Cooperative Mercantile Co. Skinners Eddy, -----	0.05
		Average, -----	0.10
	PULVERIZED OYSTER SHELL		
	BAUGH & SONS CO., PHILADELPHIA, PA.		
C-1495	Oyster Shell Lime, -----	Belleville Flour Mills, Belleville, ---	0.56
	THE CHESAPEAKE SHELL CO., BALTIMORE, MD.		
C-1468	Oyster Shell Lime, -----	Cresson Flour & Feed Mill, Cresson, ---	1.04
	POTOMAC POULTRY FOOD CO., INC., BALTIMORE, MD.		
C-1577	Potolime Oyster Shell Lime, -----	D. B. Frederick, Altoona, -----	1.63
C-1523	Potolime Oyster Shell Lime, -----	B. F. Horting, Newport, -----	0.65
		Average, -----	0.97
	ARTIFICIAL CARBONATE OF LIME		
	CASTANEA PAPER CO., JOHNSONBURG, PA.		
C-1472	Nypen Agricultural Precipitated Lime, ---	Roy Laughlin, Marion Center, -----	0.21
C-1603	Nypen Agricultural Precipitated Lime, ---	Preston Brothers, Inc., Canton, ---	0.23
C-1427	Nypen Agricultural Precipitated Lime, ---	Reynoldsville Hardware Co., Rey- noldsville, -----	0.26
C-1557	Nypen Agricultural Precipitated Lime, ---	Swacks Fertilizer Works, DuBois, --	0.19
	THE COLUMBIA PRODUCTS CO., CLEVELAND, OHIO.		
C-1474	Plant Lime, -----	Dayton Milling Co., Dayton, -----	0.21
C-1607	Plant Lime, -----	A. F. Gault, Bentleyville, -----	0.16
C-1447	Plant Lime, -----	H. B. George, Sligo, -----	1.08
C-1678	Plant Lime, -----	J. B. Hayward & Son, Monongahela	0.81
C-1610	Plant Lime, -----	W. H. Heckert, Bakerstown, -----	1.09
C-1445	Plant Lime, -----	E. E. Hunter, Hartstown, -----	1.93
C-1572	Plant Lime, -----	H. C. Hutchinson, Hydetown, -----	1.12
C-1528	Plant Lime, -----	Kiser Hardware Co., Shippensburg, -	2.31
C-1559	Plant Lime, -----	P. J. Oesterling & Son, Butler, ---	1.50
C-1604	Plant Lime, -----	Peter Shaffer & Sons, New Brighton	0.36
C-1585	Plant Lime, -----	Sykes Lumber Co., Sykesville, -----	0.62
	THE OHIO FARMERS LIME CO., CLEVELAND, OHIO.		
C-1484	Ohio Farmers Lime, -----	J. B. Hyward & Son, Monongahela	0.47
		Average, -----	0.78

## ARTIFICIAL CARBONATE OF LIME AND MARL—Continued

Calcium Oxide		Calcium Carbonate		Magnesium Oxide		Magnesium Carbonate		Insoluble Matter	Fineness					Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed		Coarsest Particles Pass Sieve Mesh No.		Amount of Sample Passing Sieve Meshes				
									Found	Guaranteed	10 Mesh	50 Mesh	100 Mesh		
%	%	%	%	%	%	%	%	%	No.	No.	%	%	%	\$	
50.27 *48.84	50.00 50.00	89.68 87.13	90.00 90.00	1.18 1.00	0.48 0.48	2.47 2.09	1.00 1.00	6.36 8.82	20 30	20 20	100.0 100.0	69.2 95.2	58.4 90.4	6.35 3.75	C-1620 C-1533
†*28.41	-----	50.68	51.75	18.79	-----	39.30	39.71	9.36	20	-----	100.0	86.0	73.2	6.50	C-1592
*42.12 51.57	45.00 -----	75.14 92.00	94.60 -----	6.75 1.95	1.00 -----	14.12 4.02	2.90 -----	10.38 3.48	20 32	20 -----	100.0 100.0	86.0 84.9	71.2 73.4	7.00 7.23	C-1595
46.71	47.00	83.33	83.75	0.52	0.50	1.09	1.00	10.00	20	14	100.0	63.2	42.4	10.00	C-1495
43.89	42.00	78.30	75.00	0.54	0.50	1.13	1.00	13.26	10	14	100.0	54.8	38.0	15.00	C-1468
43.20 42.25 44.01	42.00 42.00 -----	77.00 75.37 78.52	75.00 75.00 -----	0.67 0.59 0.58	0.50 0.50 -----	1.40 1.23 1.21	1.00 1.00 -----	12.88 17.80 13.49	10 10 13	14 14 -----	100.0 100.0 100.0	54.4 62.8 58.8	39.2 36.4 39.0	6.70 7.65 9.84	C-1577 C-1523
53.67 53.71	53.50 53.50	95.74 95.81	95.50 95.50	0.75 0.85	0.75 0.50	1.57 1.78	1.57 1.57	0.40 0.74	100 50	20 20	100.0 100.0	100.0 100.0	100.0 93.8	12.00 13.00	C-1472 C-1603
53.42 53.61	53.50 53.50	95.30 95.65	95.50 95.50	0.63 0.73	0.75 0.75	1.32 1.53	1.57 1.57	0.72 1.36	100 30	20 20	100.0 100.0	100.0 98.0	100.0 95.6	12.00 10.00	C-1427 C-1557
*45.97 47.54	47.50 47.50	82.01 84.81	84.70 84.70	4.39 4.79	3.00 3.00	9.18 10.02	6.20 6.20	2.04 3.12	20 20	20 20	100.0 100.0	94.0 97.6	90.4 94.0	11.50 12.00	C-1474 C-1607
48.59 47.10 49.47 *46.00	47.50 47.50 47.50 47.50	86.14 84.02 88.25 82.06	84.70 84.70 84.70 84.70	2.97 4.02 *2.36 4.58	3.00 3.00 3.00 3.00	6.21 8.41 4.94 9.58	6.20 6.20 6.20 6.20	1.80 2.52 1.70 2.34	20 20 20 20	20 20 20 20	100.0 100.0 100.0 100.0	98.0 96.0 98.0 93.2	96.4 89.6 95.2 90.2	12.00 11.00 9.50 9.00	C-1447 C-1678 C-1610 C-1445
48.71 47.50 48.14 49.23 *46.92	47.50 47.50 47.50 47.50 47.50	86.94 84.74 85.88 87.82 83.70	84.70 84.70 84.70 84.70 84.70	3.74 4.50 4.70 3.48 5.71	3.00 3.00 3.00 3.00 3.00	7.82 9.41 9.83 7.20 11.94	6.20 6.20 6.20 6.20 6.20	1.40 1.54 1.88 2.04 1.76	20 20 20 30 20	20 20 20 20 20	100.0 100.0 100.0 100.0 100.0	97.6 97.2 96.8 97.2 96.4	95.2 91.2 88.4 93.2 92.4	9.50 13.25 ----- 9.75 12.00	C-1572 C-1528 C-1559 C-1664 C-1585
50.87 49.38	50.00 -----	90.75 88.10	88.60 -----	2.19 3.15	1.60 -----	4.58 6.58	3.50 -----	1.78 1.70	40 34	20 -----	100.0 100.0	98.0 97.4	95.2 93.8	12.00 11.23	C-1484

\*Deficient.

†Compared with registered guarantee.

TABLE II—PULVERIZED LIMESTONE AND OYSTER SHELL,

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—	Moisture
	<b>MARL</b>		<b>%</b>
	ALBA MARL LIME CO., CHARLES- TOWN, W. VA.		
C-1647	Alba Marl, -----	W. B. Barnitz, Carlisle, -----	0.19
C-1590	Alba Marl, -----	Eulalia Milling Co., Coudersport, -	0.46
C-1631	Alba Marl, -----	H. M. Mohlar, Carrolltown, -----	0.78
C-1529	Alba Marl, -----	J. H. Sheffer Hardware, Knox, ----	0.33
	NATURAL LIME MARL CO., ROANOKE, VA.		
C-1509	Lime-Marl, -----	W. C. Follmer, Benton, -----	0.94
C-1597	Lime-Marl, -----	W. C. Follmer, Benton, -----	2.59
C-1454	Lime-Marl, -----	D. E. Goodenough, Coudersport, -	2.77
C-1462	Lime-Marl, -----	Vincent Huber, Patton, -----	3.84
C-1501	Lime-Marl, -----	H. L. Lake, Montrose, -----	2.89
C-1618	Lime-Marl, -----	H. L. Lake, Montrose, -----	3.24
C-1432	Lime-Marl, -----	Ridgway Grist Mill, Ridgway, ----	2.18
C-1006	Lime-Marl, -----	Ridgway Grist Mill, Ridgway, ----	4.39
		Average, -----	2.04

## ARTIFICIAL CARBONATE OF LIME AND MARL—Concluded

Calcium Oxide		Calcium Carbonate		Magnesium Oxide		Magnesium Carbonate		Insoluble Matter	Fineness					Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed		Coarsest Particles Pass Sieve Mesh No.		Amount of Sample Passing Sieve Meshes				
									Found	Guaranteed	10 Mesh	50 Mesh	100 Mesh		
%	%	%	%	%	%	%	%	%	No.	No.	%	%	%	\$	
53.31	50.00	95.10	90.00	0.38	0.50	0.79	-----	1.70	-----	-----	-----	-----	-----	-----	C-1647
53.77	50.00	95.92	90.00	0.20	0.50	0.42	-----	1.50	-----	-----	-----	-----	-----	11.00	C-1590
52.43	50.00	93.53	90.00	0.36	0.50	0.51	-----	1.52	-----	-----	-----	-----	-----	7.70	C-1631
52.92	50.00	94.40	90.00	0.38	0.50	0.79	-----	2.28	-----	-----	-----	-----	-----	12.50	C-1529
51.58	50.00	92.01	90.00	0.41	0.50	0.86	-----	4.90	-----	-----	-----	-----	-----	11.00	C-1509
*48.16	-----	85.91	90.00	0.75	-----	1.57	-----	6.48	-----	-----	-----	-----	-----	11.00	C-1597
*48.55	50.00	86.61	90.00	0.73	0.50	1.53	-----	4.68	-----	-----	-----	-----	-----	12.00	C-1454
*48.16	50.00	85.91	90.00	0.69	0.50	1.44	-----	4.94	-----	-----	-----	-----	-----	-----	C-1462
*47.42	50.00	84.59	90.00	0.69	0.50	1.44	-----	7.36	-----	-----	-----	-----	-----	13.00	C-1501
*48.47	50.00	86.47	90.00	0.73	0.50	1.53	-----	5.74	-----	-----	-----	-----	-----	13.00	C-1618
49.83	50.00	88.89	90.00	0.69	0.50	1.44	-----	4.50	-----	-----	-----	-----	-----	12.00	C-1432
*47.52	50.00	84.77	90.00	0.59	0.50	1.23	-----	5.82	-----	-----	-----	-----	-----	12.00	C-1606
50.18	-----	89.51	-----	0.55	-----	1.13	-----	4.29	-----	-----	-----	-----	-----	11.52	

\*Deficient.

†Compared with registered guarantee.

TABLE III—LIME AND

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
<b>LIME</b>		
AMERICAN LIME & STONE CO., BELLEFONTE, PA.		
C-1540	No. 1 Agricultural Lime, -----	American Lime & Stone Co., Bellefonte,
BLAIR LIMESTONE CO., MARTINSBURG, W. VA.		
C-1632	Shenandoah Ground Lime, -----	W. H. Hittie, Carrolltown, -----
C-1470	Shenandoah Ground Lime, -----	Otto Knoll, Cherry Tree, -----
C-1429	Shenandoah Ground Lime, -----	John A. McGee Co., Clarion, -----
C-1526	Shenandoah Ground Lime, -----	John A. McGee Co., Clarion, -----
CONSOLIDATED STONE & MINING CO., NEW CASTLE, PA.		
C-1550	Beaver Ground Lime, -----	Joseph London, Cloe, -----
ROSE POINT STONE & LIME CO., NEW CASTLE, PA.		
C-1538	Rose Point Ground Burned Lime, -----	Kline Grain Co., Shelocta, -----
Average, -----		
<b>HYDRATED LIME</b> (Low Magnesia)		
AMERICAN LIME & STONE CO., BELLEFONTE, PA.		
C-1649	American Agricultural Lime, -----	A. G. Smith, Mt. Union, -----
C-1531	Bald Eagle Hydrated Lime, -----	American Lime & Stone Co., Bellefonte,
C-1536	Bald Eagle Hydrated Lime, -----	American Lime & Stone Co., Bellefonte,
C-1564	Bald Eagle Hydrated Lime, -----	J. B. Anderson's Son, Shickshinny, -----
C-1442	Bald Eagle Hydrated Lime, -----	Anthony & Co., Renovo, -----
C-1515	Bald Eagle Hydrated Lime, -----	M. C. Deitz Sons, Mechanicsburg, -----
C-1466	Bald Eagle Hydrated Lime, -----	Ebensburg Milling & Supply Co., Ebensburg
C-1521	Bald Eagle Hydrated Lime, -----	Farmers Exchange, Indiana, -----
C-1563	Bald Eagle Hydrated Lime, -----	Farmers Exchange, Indiana, -----
C-1657	Bald Eagle Hydrated Lime, -----	Farmers Exchange, Inc., Clearfield, -----
C-1511	Bald Eagle Hydrated Lime, -----	Neal S. Harrison, Forks, -----
C-1652	Bald Eagle Hydrated Lime, -----	Neal S. Harrison, Forks, -----
C-1424	Bald Eagle Hydrated Lime, -----	Howard Creamery, Coburn, -----
C-1596	Bald Eagle Hydrated Lime, -----	Mifflinburg Farmers Exchange, Inc., Mifflin- burg, -----
C-1674	Bald Eagle Hydrated Lime, -----	Reed Estate, Phillipsburg, -----
C-1426	Bald Eagle Hydrated Lime, -----	Reynoldsville Hardware Co., Reynoldsville
C-1525	Bald Eagle Hydrated Lime, -----	Smith Brothers, Ridgway, -----
C-1493	Bald Eagle Hydrated Lime, -----	Well's Mill Co., Wyalusing, -----
J. E. BAKER COMPANY, YORK, PA.		
C-1488	Susquehanna Hydrated Lime, -----	Gibbs Milling Co., Nanticoke, -----
C-1665	Susquehanna Hydrated Lime, -----	Gibbs Milling Co., Nanticoke, -----
C-1475	Susquehanna Hydrated Lime, -----	B. F. Horting, Newport, -----
BLAIR LIMESTONE CO., MARTINSBURG, W. VA.		
C-1428	Blair Special Hydrated Lime, -----	John A. McGee Co., Clarion, -----
C-1527	Blair Special Hydrated Lime, -----	John A. McGee Co., Clarion, -----
C-1584	Blair Special Hydrated Lime, -----	John A. McGee Co., Clarion, -----
C-1490	Blair Special Hydrated Lime, -----	C. B. Tyler, Tunkhannock, -----
C-1491	Opequon Hydrated Lime, -----	C. B. Tyler, Tunkhannock, -----

## HYDRATED LIME

Calcium Oxide		Magnesium Oxide		Carbon Dioxide	Insoluble Matter	Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed				
%	%	%	%	%	%	\$	
96.28	85.00	0.67	1.00	1.47	0.20	7.50	C-1540
*42.36	48.00	*28.18	32.00	8.68	6.00	9.95	C-1632
*44.84	48.00	*27.95	32.00	8.02	6.54	10.95	C-1470
*45.40	48.00	*29.86	32.00	8.03	6.02	11.50	C-1429
*42.82	48.00	*28.87	32.00	10.10	5.57	12.00	C-1526
67.90	58.80	1.22	-----	3.47	6.12	10.00	C-1550
*70.48	75.00	1.28	1.00	3.74	8.97	12.00	C-1538
58.58	-----	17.00	-----	6.22	5.63	10.56	-----
64.22	64.00	0.93	1.00	-----	1.44	9.25	C-1640
72.50	69.00	0.83	1.00	-----	0.42	12.00	C-1531
72.56	69.00	0.73	1.00	-----	0.40	9.50	C-1536
71.45	69.00	0.84	1.00	-----	0.84	14.00	C-1564
70.01	69.00	0.95	1.00	-----	0.48	-----	C-1442
70.87	69.00	0.78	1.00	-----	2.36	-----	C-1515
70.80	69.00	0.91	1.00	-----	1.16	12.00	C-1466
71.80	69.00	0.94	1.00	-----	0.42	12.00	C-1521
71.78	69.00	0.88	1.00	-----	0.68	13.00	C-1563
73.00	69.00	0.89	1.00	-----	0.12	14.00	C-1657
72.56	69.00	0.80	1.00	-----	0.69	13.00	C-1511
72.22	69.00	0.86	1.00	-----	0.30	12.50	C-1652
71.11	69.00	0.91	1.00	-----	0.46	12.00	C-1424
72.28	69.00	0.96	1.00	-----	0.20	12.00	C-1596
71.99	69.00	0.98	1.00	-----	0.34	17.00	C-1674
70.11	69.00	0.89	1.00	-----	0.58	12.00	C-1426
72.03	69.00	0.90	1.00	-----	0.34	18.00	C-1525
71.69	69.00	0.92	1.00	-----	0.68	15.00	C-1493
65.64	65.00	3.65	3.00	-----	0.94	18.00	C-1488
65.73	65.00	3.82	3.00	-----	1.00	14.00	C-1665
69.27	65.00	4.27	3.00	-----	0.68	11.85	C-1475
68.22	60.00	1.40	1.50	-----	2.06	13.50	C-1428
66.91	60.00	1.91	1.00	-----	2.16	14.00	C-1527
64.44	60.00	2.03	1.00	-----	4.96	14.00	C-1584
63.71	60.00	1.85	1.50	-----	5.18	13.00	C-1490
67.15	65.00	1.73	2.00	-----	2.84	13.50	C-1491

\*Deficient.

TABLE III—LIME AND

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
	THE CENTRAL CHEMICAL CO., HAGERSTOWN, MD.	
C-1666	Gro-All Hydrated Lime, -----	Abe E. Engler, Wapwallopen, -----
	CHEMICAL LIME CO., BELLEFONTE, PA.	
C-1534	Agricultural Hydrated Lime, -----	Chemical Lime Co., Bellefonte, -----
C-1633	Clover Brand Agricultural Lime, -----	Z. L. Brothers, Ebensburg, -----
C-1679	Clover Brand Agricultural Lime, -----	James Harmon, Berwick, -----
C-1635	Clover Brand Agricultural Lime, -----	C. H. Mons, Kylertown, -----
	CLIMAX LIME CO., WICK, PA.	
C-1568	Hydrated Lime, -----	Geo. Kahle, South Oil City, -----
C-1547	Hydrated Lime, -----	W. G. Pringle, Carlton, -----
	CONSOLIDATED STONE & MINING CO., NEW CASTLE, PA.	
C-1479	Beaver Hydrated Lime, -----	Ed. Everett's Hardware, Warren, -----
C-1549	Beaver Hydrated Lime, -----	Joseph London, Cloe, -----
C-1586	Beaver Hydrated Lime, -----	Joseph London, Cloe, -----
	M. J. GROVE LIME CO., LIME KILN, MD.	
C-1623	Famous Frederick County Hydrated Lime, -----	Chas. Becker, Hastings, -----
	THE LEGORE LIME COMPANY, LEGORE, MD.	
C-1681	Legore Hydrated Lime, -----	West Manheim Farmers Association, Hanover, -----
	NATIONAL LIMESTONE CO., NAGINEY, PA.	
C-1508	High Grade Hydrated Lime, -----	R. K. Yoder, Belleville, -----
C-1637	High Grade Hydrated Lime, -----	R. K. Yoder, Belleville, -----
	NORTH AMERICAN CEMENT CORPORATION, HAGERSTOWN, MD.	
C-1581	Berkeley Hydra-Calcite Lime, -----	Wm. Krause, Dallas, -----
C-1558	Berkeley Hydrated Lime, -----	Banner Flour Mills, Fairchance, -----
C-1622	Berkeley Hydrated Lime, -----	Banner Flour Mills, Fairchance, -----
C-1611	Berkeley Hydrated Lime, -----	W. W. Book, Port Royal, -----
C-1600	Berkeley Hydrated Lime, -----	Firestone & Shilloto, Dillsburg, -----
C-1580	Berkeley Hydrated Lime, -----	Wm. Krause, Dallas, -----
C-1626	Berkeley Hydrated Lime, -----	N. B. Shober, Garrett, -----
C-1434	Berkeley Hydrated Lime, -----	H. L. Still, Shavertown, -----
	PARAGON PLASTER AND SUPPLY CO., BLOOMSBURG, PA.	
C-1437	Paragon Hydrate Lime, -----	George Berlew, Dallas, -----
C-1512	Paragon Hydrate Lime, -----	Neal S. Harrison, Forks, -----
C-1579	Paragon Hydrate Lime, -----	E. B. Vcsler & S. R. McMichael, Hun- lock's Creek, -----
C-1602	Paragon Hydrate Lime, -----	Wyalusing Hay Co., Wyalusing, -----
	THE PINE CREEK LIME & STONE CO., JERSEY SHORE, PA.	
C-1566	Imperial Hydrated Lime, -----	C. M. Harter, Wapwallopen, -----
C-1624	Imperial Hydrated Lime, -----	Jos. Shero, Carrolltown, -----
	ROBERT A. REICHARD, INC., ALLENTOWN, PA.	
C-1583	Reichard's Lehigh Hydrated Lime, -----	Norman Strohl, Leighton, -----
C-1439	Reichard's Lehigh Hydrated Lime, -----	John Williams & Sons, White Haven, -----
C-1638	Reichard's Lehigh Hydrated Lime, -----	John Williams & Sons, White Haven, -----

## HYDRATED LIME—Continued

Calcium Oxide		Magnesium Oxide		Carbon Dioxide	Insoluble Matter	Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed				
%	%	%	%	%	%	\$	
71.04	70.00	1.54	2.00	-----	0.46	15.00	C-1666
71.51	67.00	*0.82	1.40	-----	0.62	10.25	C-1534
72.85	69.00	1.17	1.00	-----	0.84	11.60	C-1633
73.28	69.00	0.81	1.00	-----	0.28	12.00	C-1670
72.85	69.00	0.91	1.00	-----	0.22	12.75	C-1635
60.10	60.00	0.72	0.80	-----	5.62	10.50	C-1568
59.93	60.00	1.14	0.80	-----	4.12	10.00	C-1547
60.99	55.00	1.18	1.10	-----	2.92	20.00	C-1479
59.64	55.00	1.17	1.10	-----	4.84	10.50	C-1549
58.94	55.00	1.22	1.10	-----	6.40	10.50	C-1586
*58.21	65.00	7.56	5.00	-----	7.04	11.50	C-1628
61.84	60.00	5.88	3.00	-----	4.00	-----	C-1681
70.20	60.00	5.26	2.00	-----	1.16	11.25	C-1508
67.50	60.00	4.27	2.00	-----	0.92	11.00	C-1637
*63.77	65.00	2.48	2.00	-----	1.80	12.50	C-1581
70.66	70.00	1.71	2.00	-----	0.48	14.00	C-1558
70.36	70.00	1.51	2.00	-----	0.34	14.00	C-1622
71.45	70.00	*1.47	2.00	-----	0.44	-----	C-1611
70.50	70.00	1.67	2.00	-----	0.40	-----	C-1600
70.11	70.00	1.77	2.00	-----	0.22	17.00	C-1580
70.85	70.00	1.54	2.00	-----	0.40	13.50	C-1626
70.01	70.00	1.75	2.00	-----	2.62	24.00	C-1434
64.34	63.67	1.86	2.00	-----	2.64	12.40	C-1437
*63.12	63.67	1.74	2.00	-----	3.74	13.00	C-1512
67.89	63.67	2.11	2.00	-----	1.88	11.50	C-1579
67.11	63.67	1.77	2.00	-----	5.46	14.00	C-1602
64.70	65.00	3.02	3.35	-----	6.54	11.50	C-1566
*59.95	65.00	5.55	3.35	-----	7.94	11.85	C-1624
70.39	65.00	3.82	2.00	-----	0.36	12.00	C-1583
71.13	65.00	2.88	2.00	-----	0.30	13.50	C-1439
70.09	65.00	2.66	2.00	-----	0.44	13.50	C-1638

\*Deficient.

TABLE III—LIME AND

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
<b>ROSE POINT STONE &amp; LIME CO., NEW CASTLE, PA.</b>		
C-1478	Peerless Hydrated Lime, -----	L. A. Carlson, Warren, -----
C-1446	Peerless Hydrated Lime, -----	L. A. Glessman, Conneautville, -----
C-1461	Peerless Hydrated Lime, -----	Hibner-Hoover Hardware Co., DuBois, --
C-1561	Peerless Hydrated Lime, -----	Hibner-Hoover Hardware Co., DuBois, --
C-1570	Peerless Hydrated Lime, -----	Hibner-Hoover Hardware Co., DuBois, --
C-1654	Peerless Hydrated Lime, -----	Hibner-Hoover Hardware Co., DuBois, --
C-1539	Peerless Hydrated Lime, -----	Kline Grain Co., Shelocta, -----
C-1569	Peerless Hydrated Lime, -----	Oil City Milling Co., Oil City, -----
C-1503	Peerless Hydrated Lime, -----	I. W. Scott Company, Pittsburgh, -----
C-1485	Peerless Hydrated Lime, -----	Washington Milling Co., Washington, ---
C-1619	Rose Point Hydrated Lime, -----	Hoburg Brothers, Etna, -----
C-1560	Rose Point Hydrated Lime, -----	Rose Point Stone & Lime Co., New Castle
<b>STANDARD CHEMICAL WORKS, INC., READING, PA.</b>		
C-1658	Snowflake Hydrated Lime, -----	John Fink, Shartlesville, -----
C-1668	Snowflake Hydrated Lime, -----	Gallagher & Stevick, Wilkes-Barre, -----
C-1510	Snowflake Hydrated Lime, -----	McConnell Brothers, Hughesville, -----
C-1483	Snowflake Hydrated Lime, -----	C. T. Mitchell, Brandamore, -----
C-1489	Snowflake Hydrated Lime, -----	John Montrossa, Tunkhannock, -----
C-1505	Snowflake Hydrated Lime, -----	Dennis Strohl, Lehighton, -----
<b>STEACY &amp; WILTON COMPANY, WRIGHTSVILLE, PA.</b>		
C-1646	Sterling Brand Hydrated Lime, -----	W. B. Barnitz, Carlisle, -----
C-1644	Sterling Brand Hydrated Lime, -----	W. H. Duttera, New Oxford, -----
C-1457	Sterling Brand Hydrated Lime, -----	Eulalia Milling Co., Coudersport, -----
C-1443	Sterling Brand Hydrated Lime, -----	Firestone & Shillito, Dillsburg, -----
C-1524	Sterling Brand Hydrated Lime, -----	C. F. Gelbach, Duncannon, -----
C-1598	Sterling Brand Hydrated Lime, -----	Herman & Wetzel, Selinsgrove, -----
C-1575	Sterling Brand Hydrated Lime, -----	John H. Kimble, Elk View, -----
C-1502	Sterling Brand Hydrated Lime, -----	H. L. Lake, Montrose, -----
C-1506	Sterling Brand Hydrated Lime, -----	Lehighton Hardware Co., Lehighton, ---
<b>UNIVERSAL GYPSUM &amp; LIME CO., CHICAGO, ILL.</b>		
C-1449	Challenge Brand Hydrated Lime, -----	B. E. & J. T. Cokely, Scranton, -----
C-1430	Challenge Brand Hydrated Lime, -----	Amos Eby & Co., Leaman Place, -----
C-1548	Challenge Brand Hydrated Lime, -----	Amos Eby & Co., Leaman Place, -----
C-1431	Challenge Brand Hydrated Lime, -----	Frey's Hardware, Muney, -----
C-1612	Palmer Hydrated Lime, -----	D. E. Bergstresser, Port Royal, -----
C-1601	Palmer Hydrated Lime, -----	Dillsburg Grain & Milling Co., Dillsburg,
C-1677	Palmer Hydrated Lime, -----	Amos Eby & Co., Leaman Place, -----
C-1522	Palmer Hydrated Lime, -----	W. J. Reed, Paxinos, -----
C-1556	Palmer Hydrated Lime, -----	Freas Schafer, Neseopeek, -----
C-1507	Palmer Hydrated Lime, -----	Geo. Schell, Aitah, -----
C-1648	Palmer Hydrated Lime, -----	J. G. Simpson, Huntingdon, -----
C-1599	Palmer Hydrated Lime, -----	W. B. Winey & Son, Middleburg, -----
<b>WEST BRANCH LIME CO., WILLIAMS- PORT, PA.</b>		
C-1645	Clover Leaf Hydrated Lime, -----	Herman Keebler, Montoursville, -----
<b>WHITEROCK QUARRIES, BELLEFONTE, PA.</b>		
C-1545	Nittany H-O Hydrated Lime, -----	Elwin Allen, Canton, -----
C-1463	Nittany H-O Hydrated Lime, -----	J. A. Bearer, Hastings, -----
C-1653	Nittany H-O Hydrated Lime, -----	Charles Bonnett, Troutville, -----
C-1456	Nittany H-O Hydrated Lime, -----	D. E. Goodenough, Coudersport, -----
C-1519	Nittany H-O Hydrated Lime, -----	Kline Grain Co., Shelocta, -----
C-1422	Nittany H-O Hydrated Lime, -----	Leechburg Hardware, Leechburg, -----
C-1551	Nittany H-O Hydrated Lime, -----	Mahoning Valley Milling Co., Punxsu- tawney, -----

## HYDRATED LIME—Continued

Calcium Oxide		Magnesium Oxide		Carbon Dioxide	Insoluble Matter	Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed				
%	%	%	%	%	%	\$	
59.84	55.00	1.02	1.50	-----	6.62	14.00	C-1478
56.60	55.00	1.02	1.50	-----	9.32	11.50	C-1446
59.66	55.00	1.09	1.50	-----	6.94	11.50	C-1461
62.94	55.00	1.19	1.50	-----	5.52	11.50	C-1561
59.49	55.00	1.19	1.50	-----	7.46	11.50	C-1576
59.30	55.00	*0.98	1.50	-----	10.00	11.50	C-1634
63.53	55.00	1.12	1.50	-----	5.48	12.00	C-1539
56.49	55.00	1.11	1.50	-----	7.06	10.80	C-1569
62.37	55.00	1.16	1.50	-----	6.18	-----	C-1503
61.72	55.00	1.12	1.50	-----	4.56	11.50	C-1485
57.21	55.00	1.35	1.50	-----	10.40	11.50	C-1619
61.78	55.00	1.21	1.50	-----	3.72	-----	C-1500
62.99	60.00	*4.14	6.00	-----	4.82	11.25	C-1658
60.86	60.00	*4.38	6.00	-----	4.36	18.00	C-1668
64.57	60.00	*3.21	6.00	-----	3.86	15.00	C-1510
62.72	60.00	*3.65	6.00	-----	4.86	14.00	C-1483
60.00	60.00	9.53	6.00	-----	3.28	15.00	C-1489
63.93	60.00	*3.40	6.00	-----	4.96	-----	C-1505
68.81	67.00	*4.00	5.00	-----	2.26	-----	C-1646
69.17	67.00	*3.72	5.00	-----	1.90	-----	C-1644
68.12	68.00	5.00	4.00	-----	2.14	14.00	C-1457
*66.55	68.00	6.74	4.00	-----	2.22	-----	C-1443
69.18	67.00	*4.13	5.00	-----	1.76	11.50	C-1524
68.50	67.00	*4.20	5.00	-----	2.12	13.50	C-1598
69.78	67.00	*3.93	5.00	-----	0.52	13.00	C-1575
68.09	68.00	5.19	4.00	-----	1.66	15.00	C-1502
69.59	67.00	*3.91	5.00	-----	1.84	14.00	C-1506
69.94	65.00	*2.40	5.00	-----	0.60	20.80	C-1449
69.32	65.00	*2.69	5.00	-----	1.00	-----	C-1430
71.04	65.00	*2.24	5.00	-----	0.88	-----	C-1543
68.09	65.00	4.75	5.00	-----	1.10	14.00	C-1431
67.28	65.00	5.32	5.00	-----	0.66	-----	C-1612
70.50	65.00	*2.18	5.00	-----	0.48	-----	C-1601
70.37	65.00	*3.03	5.00	-----	0.62	-----	C-1677
71.10	65.00	*3.00	5.00	-----	0.50	13.00	C-1522
68.48	65.00	5.08	5.00	-----	0.68	12.00	C-1556
69.64	65.00	4.92	5.00	-----	0.36	12.25	C-1507
70.59	65.00	*2.34	5.00	-----	0.52	11.75	C-1648
70.45	65.00	*2.83	5.00	-----	0.54	13.50	C-1599
*58.86	60-62	2.34	2-3	-----	4.58	24.00	C-1645
70.75	70.00	0.75	0.55	-----	1.70	12.50	C-1545
72.22	70.00	0.67	0.55	-----	0.48	11.75	C-1463
72.61	70.00	0.68	0.55	-----	0.42	11.30	C-1653
71.57	70.00	1.59	1.00	-----	0.32	13.00	C-1456
72.09	70.00	0.70	0.55	-----	0.44	12.50	C-1519
72.03	65-70	0.77	-----	-----	0.34	13.50	C-1422
72.33	70.00	0.77	0.55	-----	0.62	12.50	C-1551

\*Deficient.

TABLE III—LIME AND

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
C-1588	Nittany H-O Hydrated Lime, -----	Mahoning Valley Milling Co., Punxsu-
C-1620	Nittany H-O Hydrated Lime, -----	tawney, -----
C-1662	Nittany H-O Hydrated Lime, -----	Metzger Wright Co., Sheffield, -----
C-1459	Nittany H-O Hydrated Lime, -----	Mifflinburg Farmers Exchange, Inc.,
C-1425	Nittany H-O Hydrated Lime, -----	Mifflinburg, -----
C-1667	Nittany H-O Hydrated Lime, -----	J. O. Reed, Philipsburg, -----
C-1532	Nittany H-O Hydrated Lime, -----	Reynoldsville Hardware Co., Reynoldsville
		S. P. & Luther Smith, Nescopeck, -----
		Whiterock Quarries, Bellefonte, -----
	YORK VALLEY LIME & STONE CO.,	
	YORK, PA.	
C-1492	York Valley Hydrated Lime, -----	Wyalusing Hay Co., Wyalusing, -----
		Average, -----
	<b>HYDRATED LIME</b>	
	(High Magnesia)	
	THE PHILIP CAREY MANUFACTURING	
	CO., PLYMOUTH MEETING, PA.	
C-1452	Ammaco Hydrated Lime, -----	Guinn Brothers, Hawley, -----
C-1641	Ammaco Hydrated Lime, -----	O. M. Spettigue, Honesdale, -----
	G. AND W. H. CORSON, PLYMOUTH	
	MEETING, PA.	
C-1643	Corson's Prepared Lime, -----	Lake Ariel Hardware & Supply Co., Ltd.,
		Lake Ariel, -----
	DIETRICK LIME & SUPPLY CO.,	
	READING, PA.	
C-1621	Dietrick's Gold Medal Brand Hydrated Lime	John Bayer, Hamburg, -----
C-1481	Dietrick's Gold Medal Brand Hydrated Lime	W. A. Buck, Aquashicola, -----
C-1438	Dietrick's Gold Medal Brand Hydrated Lime	Gallagher & Stevie, Wilkes-Barre, -----
C-1615	Dietrick's Gold Medal Brand Hydrated Lime	Glen E. Tingley, New Milford, -----
	THE NATIONAL LIME & STONE CO.,	
	CAREY, OHIO.	
C-1614	Wyandotte Chief Hydrated Agricultural	
	Lime, -----	C. W. Deakin & Sons, Susquehanna, -----
	ROBERT A. REICHARD, INC.,	
	ALLENTOWN, PA.	
C-1595	Pennsylvania Hydrated Lime, -----	LaRue & Faucher, Meshoppen, -----
	UNITED STATES GYPSUM CO.,	
	CHICAGO, ILL.	
C-1639	U. S. G. Agricultural Hydrated Lime, ---	E. J. Stanton Son & Co., Waymart, ---
	THE VAN SCIVER CORPORATION,	
	PHILADELPHIA, PA.	
C-1676	Knickerbocker Hydrated Lime, -----	J. M. Gring & Co., Reading, -----
	CHARLES WARNER COMPANY,	
	WILMINGTON, DEL.	
C-1500	Warner's Limoid, -----	Abington Lumber Co., Dalton, -----
C-1578	Warner's Limoid, -----	Cokely Brothers, Scranton, -----
C-1482	Warner's Limoid, -----	F. H. Reutschler, Shartlesville, -----

## HYDRATED LIME—Continued

Calcium Oxide		Magnesium Oxide		Carbon Dioxide	Insoluble Matter	Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed				
%	%	%	%	%	%	\$	
73.23	70.00	0.73	0.55	-----	0.30	12.50	C-1588
72.50	70.00	0.78	0.55	-----	0.18	15.00	C-1620
73.61	70.00	0.70	0.55	-----	0.36	12.00	C-1662
72.65	70.00	0.89	0.55	-----	0.62	20.00	C-1459
72.50	70.00	0.77	0.55	-----	0.56	12.60	C-1425
73.28	70.00	0.64	0.55	-----	0.28	11.00	C-1667
72.44	70.00	0.65	0.55	-----	0.46	9.00	C-1532
69.28	68.00	*4.23	5.00	-----	0.76	15.00	C-1492
67.68	-----	2.24	-----	-----	2.27	13.25	-----
39.71	37.00	27.16	26.00	-----	13.68	15.00	C-1452
42.66	37.00	27.98	26.00	-----	7.70	14.00	C-1641
48.82	45-55	31.38	30-35	-----	0.72	14.00	C-1643
45.70	45.00	28.03	28.00	-----	3.34	12.00	C-1621
*44.61	46.00	*28.85	30.00	-----	4.28	13.00	C-1481
*44.13	46.00	*26.66	30.00	-----	4.70	20.00	C-1438
46.93	45.00	27.65	28.00	-----	1.22	13.50	C-1615
†*43.07	-----	†*31.29	-----	-----	1.35	17.00	C-1614
59.49	55.00	*13.88	15.00	-----	1.04	13.50	C-1594
48.33	40.00	27.50	20.00	-----	0.76	15.00	C-1639
48.56	45.00	33.58	30.00	-----	0.62	11.00	C-1676
47.84	45.00	31.99	30.00	-----	1.72	16.00	C-1500
47.54	45.00	30.63	30.00	-----	1.56	19.80	C-1578
47.97	45.00	33.62	30.00	-----	1.88	-----	C-1482

\*Deficient.

†Compared with registered guarantee.

TABLE III—LIME AND

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
C-1604 C-1609 C-1616	Warner's Limoid, ----- Warner's Limoid, ----- Warner's Limoid, -----	F. H. Rentschler, Shartlesville, ----- F. H. Rentschler, Shartlesville, ----- Summitt Farm Equipment Co., Clarks Summitt, ----- West Side Building Material Co., Luzerne,
C-1553	Warner's Limoid, -----	Average, -----
MISCELLANEOUS		
AMERICAN LIME & STONE CO., BELLEFONTE, PA.		
C-1623	Forkings, -----	V. A. Huber, Patton, -----
THE BUFFALO SLAG CO., BUFFALO, N. Y.		
C-1609	Bison Brand Agricultural Slag, -----	Marion Center Milling Co., Marion Center
M. J. GROVE LIME CO., LIME KILN, MD		
C-1555	Famous Frederick County Carbo Oxide Lime, -----	James Harman, Berwick, -----
WHITEROCK QUARRIES, BELLEFONTE, PA.		
C-1464	Lime Forkings, -----	Jos. Riner, Patton, -----

## HYDRATED LIME—Concluded

Calcium Oxide		Magnesium Oxide		Carbon Dioxide	Insoluble Matter	Selling price per ton at place of selection	Chemist's number
Found	Guaranteed	Found	Guaranteed				
%	%	%	%	%	%	\$	
46.76	45.00	31.04	30.00	-----	1.16	-----	C-1604
48.11	45.00	32.81	30.00	-----	1.64	-----	C-1660
47.98	45.00	33.80	30.00	-----	0.60	13.50	C-1616
45.69	45.00	31.09	30.00	-----	2.08	18.00	C-1553
46.88	-----	29.38	-----	-----	2.78	15.02	-----
80.46	-----	1.45	-----	-----	4.50	6.00	C-1623
49.20	44.00	*2.62	4.00	-----	37.72	6.05	C-1609
66.56	35.00	0.78	0.50	-----	1.44	10.25	C-1555
83.94	-----	1.23	-----	1.20	2.36	6.05	C-1464

\*Deficient.

TABLE IV—GYPSUM

Chemist's number	Name of Manufacturer and Brand	Sample Taken From—
C-1453 C-1441 C-1516 C-1476 C-1663	<p>THE AMERICAN AGRICULTURAL CHEMICAL CO., NEW YORK, N. Y.</p> <p>Ground Land Plaster, ----- Ground Land Plaster, ----- Ground Land Plaster, ----- Ground Land Plaster, ----- Ground Land Plaster, -----</p>	<p>C. L. Bentzel, New Oxford, ----- J. E. Jackson, Everett, ----- J. E. Jackson, Everett, ----- D. K. Lightner, Loysville, ----- W. B. Winey &amp; Son, Middleburg, -----</p>
C-1450 C-1640	<p>UNITED STATES GYPSUM COMPANY, CHICAGO, ILL.</p> <p>Ben Franklin Agricultural Gypsum, ----- Ben Franklin Agricultural Gypsum, -----</p>	<p>E. J. Stanton Son &amp; Co., Waymart, ---- E. J. Stanton Son &amp; Co., Waymart, ----  Average, -----</p>

## OR LAND PLASTER

Moisture	Calcium Oxide		Sulphur Trioxide		Gypsum (Estimated CaSO <sub>4</sub> )		Insoluble Matter	Selling price per ton at place of selection	Chemist's number
	Found	Guaranteed	Found	Guaranteed	Found	Guaranteed			
%	%	%	%	%	%	%	%	\$	
0.61	*29.71	30.48	*40.10	43.60	86.23	-----	3.52	17.75	C-1453
0.52	31.57	30.48	43.06	43.00	92.60	-----	2.24	20.00	C-1441
0.34	31.82	30.48	42.82	43.00	92.08	-----	2.46	20.00	C-1516
0.46	31.30	30.48	*41.74	43.00	89.76	-----	3.06	19.00	C-1476
4.15	32.50	30.48	*42.42	43.00	91.22	-----	1.54	20.00	C-1663
6.24	†*31.75	-----	†*41.64	-----	89.54	-----	3.87	15.00	C-1450
0.90	33.16	-----	43.26	-----	93.03	68.00	3.78	13.00	C-1640
1.89	31.69	-----	42.15	-----	90.64	-----	2.92	17.82	

\*Deficient.

†Compared with registered guarantee.



# PENNSYLVANIA DEPARTMENT OF AGRICULTURE

## Organization and Services

O. G. JORDAN, *Secretary of Agriculture* . . . R. G. BRESSLER, *Deputy Secretary*

This Department is essentially a service agency created by legislative enactment to deal with administrative, regulatory, investigational, and educational problems which can best be solved through public rather than individual action. The organization provides for coordination and cooperation with the Pennsylvania State College and the U. S. Department of Agriculture. The Department operates through the following bureaus:

### ANIMAL INDUSTRY: T. E. MUNCE, *Director and State Veterinarian.*

Prevents and Eradicates transmissible diseases of animals and poultry, including tuberculosis of animals in cooperation with Federal Government.

Demonstrates to veterinarians control methods for transmissible animal diseases: Supervises vaccination for and the prevention of hog cholera, anthrax, black leg and hemorrhagic septicemia;

Protects public from unwholesome meats through ante and post mortem examinations of animals at slaughtering establishments;

Inspects, licenses and furnishes information as to breeding, soundness and conformation of stallions and jacks standing for public service;

Enforces law requiring licensing of dogs and providing for protection of livestock and people from attacks of uncontrolled dogs;

Maintains laboratory for diagnostic research and experimental projects.

### PLANT INDUSTRY: R. H. BELL, *Director,*

Tests agricultural seeds for purity and germination, and enforces State Seed Law;

Inspects orchards, parks, farms, and plant imports for injurious insects and plant diseases;

Inspects and licenses Pennsylvania nurseries, and licenses all dealers in nursery stock;

Enforces laws governing apicultural practices, disease control and housing;

Places and enforces quarantines and carries on eradication campaigns against insect pests and plant diseases;

Inspects and certifies potatoes for seed purposes;

Makes investigations for the control of injurious insects and plant diseases including field tests of insecticides, fungicides and weed killers;

Maintains collections of insects, plant diseases, plants, and seeds, and identifies specimens.

### FOODS AND CHEMISTRY: JAMES W. KELLOGG, *Director—Chief Chemist.*

Accomplishes its purpose of protecting Pennsylvania homes against harmful foodstuffs by sampling, analyzing, and bringing prosecution under the laws relating to foods and non-alcoholic drinks, including milk, cream, butter, ice-cream, eggs, sausage, fresh meats, soft drinks, fruit syrups, vinegar and kindred food products;

Regulates and issues licenses for the manufacture and sale of oleomargarine;

Licenses and regulates egg-opening plants and cold storage warehouses, maintaining regular inspection and enforcing twelve-month storage limit;

Inspects milk plants and creameries and regulates weighing, testing, buying and selling of milk and cream on a butterfat basis;

Protects honest manufacturers, importers, selling agents and ultimate users of feeding stuffs, fertilizers, lime products, linseed oil, paint, putty, turpentine, insecticides and fungicides, by means of annual registrations followed by inspections, analyses, prosecutions and the publication of the analyses of these products;

Analyzes special samples for residents of the State at the rate of \$1.00 a sample for feeding stuffs, lime products and linseed oils.

### MARKETS: GEO. A. STUART, *Acting Director.*

Investigates and assists in the marketing of farm products; at present chiefly grain and hay, fruits and vegetables, poultry and eggs, and tobacco;

Compiles and distributes daily market information as to supplies, shipments and prices;

Advises growers on transportation of agricultural products;

Assists cooperative associations and public markets;

Establishes standard grades of farm products and maintains inspection.

### STATISTICS: L. H. WIBLE, *Director.*

Assembles and disseminates essential statistic and facts pertaining to the agriculture of the State, from monthly reports rendered by hundreds of volunteer crop correspondents, information which assists the producer in his sales and interests all industries which deal with agricultural products;

Cooperates with U. S. Bureau of Agricultural Economics in joint crop and livestock reporting and publishes annual and monthly summaries of the data;

Compiles dates of county and local fairs and assembles data pertaining to their success and results during each year.

